

ABSTRACT

The invention is directed to a lentiviral vector system that can be used for episomal replication of a desired gene. The vector system contains a first vector containing a lentiviral *gag* gene encoding a lentiviral gag protein, a second vector containing an *env* gene encoding a functional envelope protein, and a lentiviral *pol* gene encoding a lentiviral pol protein. The pol protein is at least integrase, but that the integrase has been modified so that it is not capable of integration. This *pol* gene can be on the first or second vectors or on a third vector. The lentiviral gag and pol and the envelope protein are not on a single vector, and these vectors do not contain nucleotides to effectively package lentiviral RNA. The system also contains another vector having a nucleic acid sequence encoding a target molecule operably linked to a component of an episomal replicon and a lentiviral packaging sequence.

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